

## Mode Cleaner Specifications

|                         |                       | CLIO                  | Comments            |
|-------------------------|-----------------------|-----------------------|---------------------|
| Modulation Freq.        | $f_m$                 | 15.75MHz              | (To be transmitted) |
| Round-trip Length       | $\lambda_m = c / f_m$ | 19.034m               |                     |
| Reflectivity            | $R_{in} / R_{out}$    | 0.9986                | HR surface          |
|                         | $R_{end}$             | 0.9999                |                     |
| Finess                  |                       |                       |                     |
| Transmissivity          | $T_{in} / T_{out}$    | 0.925                 | AR surface          |
|                         | $T_{end}$             |                       |                     |
| Curvature               | in/out                | flat                  | HR surface          |
|                         | end                   | 15m                   |                     |
|                         | in/out                | flat                  | AR surface          |
|                         | end                   | flat                  |                     |
| Beam Waist Size         |                       |                       |                     |
| Beam Size at End Mirror |                       |                       |                     |
| Mirror Size             | in/out                | $\varnothing 100$ t30 |                     |
|                         | end                   | $\varnothing 100$ t60 |                     |
|                         |                       |                       |                     |